
Certified for HP-UX

PCI Device Certification Acceptance Report

Date: October 17, 2002

Congratulations! The product you have submitted has successfully met the compliance criteria and has been accepted. Your product is now officially "Certified for HP-UX"! Below, you will find specific details concerning all of the tests performed.

Vendor and Product Description

Vendor: JNI Corp

Product: FireStar 1 Gb 64-bit/33-Mhz Dual Port PCI-to-Fibre Channel HBA, Part # FCE2-6412-N-HP

Software: HP-UX driver 4.0.1

Description: 1 Gb 64-bit/33-Mhz Dual Port PCI-to-Fibre Channel HBA.

Vendor Supported Hardware Platforms

- HP-UX 9000 RP-2450 (A500-Class)Server
- HP-UX 9000 RP-5450 (L2000-Class)Server
- HP-UX 9000 RP-7400 (N4000-Class) Server

Vendor Supported Operating Environments:

- HP-UX 11.00
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HP-UX 9000 System Compliance Requirements

The product successfully meets the compliance criteria for HP-UX 9000 Systems as defined by Hewlett Packard. This includes the following:

1. Testing the product on each of the specified hardware platforms.
2. Testing the product on each of the specified Operating Environments.
3. Verifying that documentation is appropriate.
4. Verifying that the product installs and uninstalls properly.
5. Verifying the product does not fail under stress.
6. Verifying standard features perform as expected.
7. Verifying vendor supplied diagnostic tools perform as expected.
8. Verifying performance meets Hewlett Packard expectations.

1.0 Platforms Tested

The product submitted was successfully tested for certification compliance on each of the following platforms:

- RP-2450 (A500-Class)
 - Model A500-440Mhz
 - PDC Firmware 41.17
 - Using HP-UX 11.00
- RP-5450 (L2000-Class)
 - Model L2000-440Mhz
 - PDC Firmware 41.39
 - Using HP-UX 11.00
- RP-7400 (N4000-Class)
 - Model N4000-440Mhz
 - PDC Firmware 41.46
 - Using HP-UX 11.00

Comments and Observations: Each system was tested with multiple slots and slot types. HP-UX systems support shared, turbo and twin turbo slots as outlined in the HP-UX certification test plan

2.0 Operating Environments Tested

The product submitted was successfully tested for certification compliance on the following O.S. platforms:

- HP-UX 11.00
- Quality Pack for HP-UX 11.0, March 2002
- Trial HP GlancePlus/UX Pak for s800 11.0
- HP OnLineJFS (Advanced VxFS)
- DCE/9000 Kernel Threads Support
- English HP-UX 64-bit Runtime Environment
- Hardware Enablement Patches for HP-UX 11.00, March 2002
- Quality Pack for HP-UX 11.00, March 2002
- HP-UX Unlimited-User License
- General Release Patches, November 1999 (ACE)
- JNIC 4.0.1 JNI Fibre Channel SCSI ID

Comments and Observations: The JNI FireStar 1 Gb 64-bit/33-Mhz Dual Port PCI-to-Fibre Channel HBA, Part # FCE2-6412-N-HP is compliant with the HP-UX 11.0 platform and is compliant with the Hewlett-Packard's Software Distributor (SD) packaging standards.

3.0 Documentation Compliance

The product successfully meets the compliance criteria for the Documentation Requirements as defined by Hewlett Packard. Specific installation instructions were available, specifying when user intervention is required for installation to an appropriately configured and localized HP-UX platform(s).

Comments and Observations: Special instructions are needed for SCSI Fibre Channel Volume Set Addressing used extensible by Hewlett-Packards Mass storage devices. This was documented in the readme file that comes with the JNI driver.

4.0 Driver Installation and un-Installation Tests

The product successfully meets the compliance criteria for installation and removal as defined by Hewlett-Packard. The product must install properly, uninstall completely, and reinstall properly. The product should also behave correctly during a reinstall attempt if the product has already been installed.

Comments and Observations: The JNI driver meets HP's compliance criteria of installation, and removal using Hewlett Packard Software Distributed packing tools.

5.0 HP-UX Functional Testing

The product successfully meets the HP-UX functional testing requirements defined by Hewlett-Packard. The product must be able to handle the common functional HP-UX commands and meets the compliance criteria standard for each command.

Comments and Observations: The JNI driver meets HP's functional testing requirements for all functional commands tested.

6.0 Stress Testing

The product successfully meets the compliance criteria for Stress testing as defined by Hewlett-Packard. Stress Testing specifics heavy file system I/O loads with forced failures for a specified period of time using Hewlett Packard proprietary stress tests. The product must meet the following compliance criteria expectations: It must not fail or cause conflict with other software or the operating system.

Comments and Observations: The JNI product pass all Hazard testing:

- File system stress testing using VxVM and HFS (Hazard C8).
- File system stress testing with recovery options (Hazard C15).
- File system stress testing with forced failure modes (Hazard C16).

7.0 Standard Features and Compatibility Testing

The product successfully meets the compliance criteria for Functionality and Compatibility as defined by Hewlett Packard. Vendor and industry standard tests were verified for Functionality and Compatibility. These tests validate that the HP-UX system recognizes the card properly and that the product is installed and functioning.

Comments and Observations: Testing was performed with the product in each different PCI slot type. The PCI slots tested are the shared, turbo and twin turbo types. IOSCAN and LSDEV verified that the card was recognized by the HP-UX system.

8.0 Diagnostic Tools

JNI did not submit any diagnostic tools for this product.

Comments and Observations: Any errors and status are sent to the HP-UX's system log. JNI's EZ Fibre tool can be used to verify access as outlined in JNI's documentation.

9.0 Minimum Performance Compliance

The product successfully meets the compliance criteria for Minimum Performance as defined by Hewlett Packard. Specifically. The product was successfully able to perform the tasks for which it was designed without interfering with the correct behavior of other system components.

Comments and Observations: Performance measurement was performed by glance under high stress loads using Hazard C8. Product meets the stated performance standard and is within documented specifications.

Testing Configuration

Testing Configuration Notes:

Testing was setup with each HP-UX 9000 system configured with the latest firmware, a standard OS installation and the latest Quality Pack from HP. Testing was performed on the 11:00 ring as outlined in the Fibre Channel Certification Test Plan.

Supplemental testing of the VA7x00 in both "HP-UX" and "Generic" attachment mode was performed.

NOTE: HP does not endorse or is any way liable for support of any peripherals that may be connected to this HBA even if they have been used/referenced in the test configuration.
